— THE EVIDENCE FOR — ANCIENT ATOMIC WARFARE

Religious texts and geological evidence suggest that several parts of the world have experienced destructive atomic blasts in ages past.

Part 1 of 2

by David Hatcher Childress © 2000

Extracted from Chapter 6 of his book Technology of the Gods: The Incredible Sciences of the Ancients

Published by Adventures Unlimited Press Kempton, Illinois, USA Website: www.adventuresunlimited.co.nz The following item appeared in the New York *Herald Tribune* on February 16, 1947 (and was repeated by Ivan T. Sanderson in the January 1970 issue of his magazine, *Pursuit*):

When the first atomic bomb exploded in New Mexico, the desert sand turned to fused green glass. This fact, according to the magazine Free World, has given certain archaeologists a turn. They have been digging in the ancient Euphrates Valley and have uncovered a layer of agrarian culture 8,000 years old, and a layer of herdsman culture much older, and a still older caveman culture. Recently, they reached another layer...of fused green glass.

It is well known that atomic detonations on or above a sandy desert will melt the silicon in the sand and turn the surface of the Earth into a sheet of glass. But if sheets of ancient desert glass can be found in various parts of the world, does it mean that atomic wars were fought in the ancient past or, at the very least, that atomic testing occurred in the dim ages of history?

This is a startling theory, but one that is not lacking in evidence, as such ancient sheets of desert glass are a geological fact. Lightning strikes can sometimes fuse sand, meteorol-ogists contend, but this is always in a distinctive root-like pattern. These strange geological oddities are called *fulgurites* and manifest as branched tubular forms rather than as flat sheets of fused sand. Therefore, lightning is largely ruled out as the cause of such finds by geologists, who prefer to hold onto the theory of a meteor or comet strike as the cause. The problem with this theory is that there is usually no crater associated with these anomalous sheets of glass.

Brad Steiger and Ron Calais report in their book, *Mysteries of Time and Space*,¹ that Albion W. Hart, one of the first engineers to graduate from Massachusetts Institute of Technology, was assigned an engineering project in the interior of Africa. While he and his men were travelling to an almost inaccessible region, they first had to cross a great expanse of desert.

[°]At the time he was puzzled and quite unable to explain a large expanse of greenish glass which covered the sands as far as he could see," writes Margarethe Casson in an article on Hart's life in the magazine *Rocks and Minerals* (no. 396, 1972). She then goes on to mention: "Later on, during his life...he passed by the White Sands area after the first atomic explosion there, and he recognized the same type of silica fusion which he had seen fifty years earlier in the African desert."²

Tektites: A Terrestrial Explanation?

Large desert areas strewn with mysterious globules of "glass"—known as *tektites*—are occasionally discussed in geological literature. These blobs of "hardened glass" (glass is a liquid, in fact) are thought to come from meteorite impacts in most instances, but the evidence shows that in many cases there is no impact crater.

Another explanation is that tektites have a terrestrial explanation—one that includes atomic war or high-tech weapons capable of melting sand. The tektite debate was summed up in an article entitled "The Tektite Problem", by John O'Keefe, published in the August 1978 edition of *Scientific American*. Said O'Keefe:

If tektites are terrestrial, it means that some process exists by which soil or common rocks can be converted in an instant into homogeneous, water-free, bubble-free glass and be propelled thousands of miles above the atmosphere. If tektites come from the Moon, it seems to follow that there is at least one powerful volcano somewhere on the Moon that has erupted at least as recently as 750,000 years ago. Neither possibility

is easy to accept. Yet one of them must be accepted, and I believe it is feasible to pick the more reasonable one by rejecting the more unlikely.

The key to solving the tektite problem is an insistence on a physically reasonable hypothesis and a resolute refusal to be impressed by mere numerical coincidences such as the simi - larity of terrestrial sediments to tektite material. I believe that the lunar volcanism hypothesis is the only one physically possible, and that we have to accept it. If it leads to unex - pected but not impossible conclusions, that is precisely its utility.

To cite just one example of the utility, the lunar origin of tektites strongly supports the idea that the Moon was formed

by fission of the Earth. Tektites are indeed much more like ter restrial rocks than one would expect of a chance assemblage. If tektites come from a lunar magma, then deep inside the Moon there must be material that is very much like the mantle of the Earth—more like the mantle than it is like the shal lower parts of the Moon from which the lunar surface basalts have originated. If the Moon was formed by fission of the Earth, the object that became

Libyan Desert Glass (LDG) is the purest natural silica glass ever found. Over a thousand tonnes of it are strewn across hundreds of kilometres of bleak desert. Some of the chunks weigh 26 kilograms...

the Moon would have been heated intensely and from the out side, and would have lost most of its original mass and in particular the more volatile elements. The lavas constituting most of the Moon's present surface were erupted early in the Moon's history, when its heat was concentrated in the shal low depleted zone quite near the surface. During the recent periods represented by tektite falls, the sources of lunar vol canism have necessarily been much deeper, so that any vol canoes responsible for tektites have drawn on the lunar mate rial that suffered least during the period of ablation and is therefore most like unaltered terrestrial mantle material. Ironically, that would explain why tektites are in some ways more like terrestrial rocks than they are like the rocks of the lunar surface.

Mysterious Glass in the Egyptian Sahara

One of the strangest mysteries of ancient Egypt is that of the great glass sheets that were only discovered in 1932. In December of that year, Patrick Clayton, a surveyor for the Egyptian Geological Survey, was driving among the dunes of the



A fulgurite: sand fused or vitrified by lightning

Great Sand Sea near the Saad Plateau in the virtually uninhabited area just north of the southwestern corner of Egypt, when he heard his tyres crunch on something that wasn't sand. It turned out to be large pieces of marvellously clear, yellow-green glass.

In fact, this wasn't just any ordinary glass, but ultra-pure glass that was an astonishing 98 per cent silica. Clayton wasn't the first person to come across this field of glass, as various 'prehistoric' hunters and nomads had obviously also found the now-famous Libyan Desert Glass (LDG). The glass had been used in the past to make knives and sharp-edged tools as well as other objects. A carved scarab of LDG was even found in Tutankhamen's tomb, indicating that the glass was sometimes used for jewellery.

An article by Giles Wright in the British science magazine New

Scientist (July 10, 1999), entitled "The Riddle of the Sands", says that LDG is the purest natural silica glass ever found. Over a thousand tonnes of it are strewn across hundreds of kilometres of bleak desert. Some of the chunks weigh 26 kilograms, but most LDG exists in smaller, angular pieces—looking like shards left when a giant green bottle was smashed by colossal forces.

According to the article, LDG, pure as it is, does contain tiny bubbles, white wisps and inky black swirls. The whitish inclusions consist of

refractory minerals such as cristobalite. The ink-like swirls, though, are rich in iridium, which is diagnostic of an extraterrestrial impact such as a meteorite or comet, according to conventional wisdom. The general theory is that the glass was created by the searing, sand-melting impact of a cosmic projectile.

However, there are serious problems with this theory, says Wright, and many mysteries concerning this stretch of desert containing the pure glass. The main problem: Where did this immense amount of widely dispersed glass shards come from? There is no evidence of an impact crater of any kind; the surface of the Great Sand Sea shows no sign of a giant crater, and neither do microwave probes made deep into the sand by satellite radar.

Furthermore, LDG seems to be too pure to be derived from a messy cosmic collision. Wright mentions that known impact craters, such as the one at Wabar in Saudi Arabia, are littered with bits of iron and other meteorite debris. This is not the case with the Libyan Desert Glass site. What is more, LDG is concentrated in two areas, rather than one. One area is oval-shaped; the other is a circular ring, six kilometres wide and 21 kilometres in diameter. The ring's wide centre is devoid of the glass.

One theory is that there was a *soft* projectile impact: a meteorite, perhaps 30 metres in diameter, may have detonated about 10 kilometres or so above the Great Sand Sea, the searing blast of hot air melting the sand beneath. Such a craterless impact is thought to have occurred in the 1908 Tunguska event in Siberia—at least as far as mainstream science is concerned. That event, like the pure desert glass, remains a mystery.

Another theory has a meteorite glancing off the desert surface, leaving a glassy crust and a shallow crater that was soon filled in. But there are two known areas of LDG. Were there two cosmic projectiles in tandem?

Alternatively, is it possible that the vitrified desert is the result of atomic war in the ancient past? Could a Tesla-type beam weapon have melted the desert, perhaps in a test?

An article entitled "Dating the Libyan Desert Silica-Glass"

appeared in the British journal *Nature* (no. 170) in 1952. Said the author, Kenneth Oakley:³

Pieces of natural silica-glass up to 16 lb in weight occur scattered sparsely in an oval area, measuring 130 km north to south and 53 km from east to west, in the Sand Sea of the Libyan Desert. This remarkable material, which is almost pure (97 per cent silica), relatively light (sp. gin. 2.21), clear and yellowish-green in colour, has the qualities of a gem stone. It was discovered by the Egyptian Survey Expedition under Mr P.A. Clayton in 1932, and was thoroughly investi gated by Dr L.J. Spencer, who joined a special expedition of the Survey for this purpose in 1934.

The pieces are found in sand-free corridors between north-

south dune ridges, about 100 m high and 2–5 km apart. These corridors or "streets" have a rubbly surface, rather like that of a "speedway" track, formed by angular gravel and red loamy weathering debris overly ing Nubian sandstone. The pieces of glass lie on this sur face or partly embedded in it. Only a few small fragments were found below the surface, and none deeper than about one metre. All the pieces on the sur face have been pitted or

One of the great mysteries of classical archaeology is the existence of many vitrified forts in Scotland. Are they also evidence of some ancient atomic war?

smoothed by sand-blast. The distribution of the glass is patchy...

While undoubtedly natural, the origin of the Libyan silicaglass is uncertain. In its constitution it resembles the tektites of supposed cosmic origin, but these are much smaller. Tektites are usually black, although one variety found in Bohemia and Moravia and known as moldavite is clear deepgreen. The Libyan silica-glass has also been compared with the glass formed by the fusion of sand in the heat generated by the fall of a great meteorite; for example, at Wabar in Arabia and at Henbury in central Australia.

Reporting the findings of his expedition, Dr Spencer said that he had not been able to trace the Libyan glass to any source; no fragments of meteorites or indications of meteorite craters could be found in the area of its distri bution. He said: "It seemed easier to assume that it had simply fallen from the sky."

It would be of considerable interest if the time of ori gin or arrival of the silica-glass in the Sand Sea could be determined geologically or archaeologically. Its restriction to the surface or top layer of a superficial deposit suggests that it is not of great antiquity from the geological point of view. On the other hand, it has clearly been there since prehistoric times. Some of the flakes were submitted to Egyptologists in Cairo, who regarded them as "late Neolithic or pre-dynastic". In spite of a careful search by Dr Spencer and the late Mr A. Lucas, no objects of silica-glass could be found in the collections from Tut-Ankh-Amen's tomb or from any of the other dynastic tombs. No potsherds were encoun tered in the silica-glass area, but in the neighbourhood of the flakings some "crude spear-points of glass" were found; also some quartzite implements, "quernstones" and ostrich-shell fragments.

Oakley is apparently incorrect when he says that LDG was

not found in Tutankhamen's tomb, as according to Wright a piece *was* found.

At any rate, the vitrified areas of the Libyan Desert are yet to be explained. Are they evidence of an ancient war—a war that may have turned North Africa and Arabia into the desert that it is today?

The Vitrified Forts of Scotland

One of the great mysteries of classical archaeology is the existence of many vitrified forts in Scotland. Are they also evidence of some ancient atomic war? Maybe, but maybe not.

There are said to be at least 60 such forts throughout Scotland. Among the most well-known are Tap o'Noth, Dunnideer, Craig

> Phadraig (near Inverness), Abernathy (near Perth), Dun Lagaidh (in Ross), Cromarty, Arka-Unskel, Eilean na Goar, and Bute-Dunagoil on the Sound of Bute off Arran Island. Another well-known vitrified fort is the Cauadale hill-fort in Argyll, West Scotland.

> One of the best examples of a vitrified fort is Tap o'Noth, which is near the village of Rhynie in northeastern Scotland. This massive fort from prehistory is on the summit of a mountain of the same name which, being 1,859 feet (560 metres) high, com-

mands an impressive view of the Aberdeenshire countryside. At first glance it seems that the walls are made of a rubble of stones, but on closer look it is apparent that they are made not of dry stones but of melted rocks! What were once individual stones are now black and cindery masses, fused together by heat that must have been so intense that molten rivers of rock once ran down the walls.

Reports on vitrified forts were made as far back as 1880 when Edward Hamilton wrote an article entitled "Vitrified Forts on the West Coast of Scotland" in the *Archaeological Journal* (no. 37, 1880, pp. 227–243). In his article, Hamilton describes several sites in detail, including Arka-Unskel:⁴

At the point where Loch na Nuagh begins to narrow, where



Distribution of tektites, with their theoretical ages

the opposite shore is about one-and-a-half to two miles dis tant, is a small promontory connected with the mainland by a narrow strip of sand and grass, which evidently at one time was submerged by the rising tide. On the flat summit of this promontory are the ruins of a vitrified fort, the proper name for which is Arka-Unskel.

The rocks on which this fort are placed are metamorphic gneiss, covered with grass and ferns, and rise on three sides almost perpendicular for about 110 feet from the sea level. The smooth surface on the top is divided by a slight depres sion into two portions. On the largest, with precipitous sides

to the sea, the chief portion of the fort is situated, and occupies the whole of the flat surface. It is of somewhat oval form. The circumference is about 200 feet, and the vitrified walls can be traced in its entire length... We dug under the vitrified mass, and there found what was extremely interesting, as throwing some light on the manner in which the fire was applied for the purpose of vitrification. The internal part of the upper or vitrified wall for about a foot or a foot-and-a-half was untouched by the fire, except that some of the flat stones were slightly agglutinated together,

huge blocks of stones have been fused with smaller rubble to form a hard, glassy mass. Explanations for the vitrification are few and far between, and none of them is universally accepted.

and that the stones, all feldspatic, were placed in layers one upon another.

It was evident, therefore, that a rude foundation of boulder stones was first formed upon the original rock, and then a thick layer of loose, mostly flat stones of feldspatic sand, and of a different kind from those found in the immediate neigh borhood, were placed on this foundation, and then vitrified by heat applied externally. This foundation of loose stones is found also in the vitrified fort of Dun Mac Snuichan, on Loch Etive.



A flanged tektite

Hamilton describes another vitrified fort that is much larger, situated on the island at the entrance of Loch Ailort.

This island, locally termed Eilean na Goar, is the most east ern and is bounded on all sides by precipitous gneiss rocks; it is the abode and nesting place of numerous sea birds. The flat surface on the top is 120 feet from the sea level, and the remains of the vitrified fort are situated on this, oblong in form, with a continuous rampart of vitrified wall five feet thick, attached at the SW end to a large upright rock of gneiss. The space enclosed by this wall is 420 feet in circum ference and 70 feet in width. The rampart is continuous and

In this vitrification process,

At the eastern end is a great mass of wall in situ, vitrified on both sides. In the centre of the enclosed space is a deep depression in which are masses of the vitrified wall strewed about, evidently detached from their original site. Hamilton naturally asks a few

about five feet in thickness.

obvious questions about the forts. Were these structures built as a means of defence? Was the vitrification the result of design or accident? How was the vitrification produced?

In this vitrification process,

huge blocks of stones have been fused with smaller rubble to form a hard, glassy mass. Explanations for the vitrification are few and far between, and none of them is universally accepted.

One early theory was that these forts are located on ancient volcanoes (or the remains of them) and that the people used molten stone ejected from eruptions to build their settlements.

This idea was replaced with the theory that the builders of the walls had designed the forts in such a way that the vitrification was purposeful in order to strengthen the walls. This theory postulated that fires had been lit and flammable material added to produce walls strong enough to resist the dampness of the local climate or the invading armies of the enemy. It is an interesting theory, but one that presents several problems. For starters, there is really no indication that such vitrification actually strengthens the walls of the fortress; rather, it seems to weaken them. In many cases, the walls of the forts seem to have collapsed because of the fires. Also, since the walls of many Scottish forts are only partially vitrified, this would hardly have proved an effective building method.

Julius Caesar described a type of wood and stone fortress, known as a *murus gallicus*, in his account of the Gallic Wars. This was interesting to those seeking solutions to the vitrified fort mystery because these forts were made of a stone wall filled with rubble, with wooden logs inside for stability. It seemed logical to suggest that perhaps the burning of such a wood-filled wall might create the phenomenon of vitrification.

Some researchers are sure that the builders of the forts caused the vitrification. Arthur C. Clarke quotes one team of chemists from the Natural History Museum in London who were studying the many forts:5

Considering the high temperatures which have to be produced, and the fact that possibly sixty or so vitrified forts are to be seen in a limited geographical area of Scotland, we do not believe that this type of structure is the result of

However, one Scottish archaeologist, Helen Nisbet, believes that the vitrification was not done on purpose by the builders of the forts. In a thorough analysis of rock types used, she reveals that most of the forts were built of stone easily available at the chosen site and not chosen for their property of vitrification.⁶

The vitrification process itself, even if purposely set, is quite a mystery. A team of chemists on Arthur C. Clarke's Mysterious World subjected rock samples from 11 forts to rigorous chemical analysis, and stated that the temperatures needed to produce the vitrification were so intense-up to 1,100°C-that a simple burning of walls with wood interlaced with stone could not have achieved such temperatures.7

Nevertheless, experiments carried out in the 1930s by the

famous archaeologist V. Gordon Childe and his colleague Wallace Thorneycroft showed that forts could be set on fire and generate enough heat to vitrify the stone.⁸ In 1934, these two designed a test wall that was 12 feet long, six feet wide and six feet high, which was built for them at Plean Colliery in Stirlingshire. They used old fireclay bricks for the faces and pit props as timber, and filled the cavity between the walls with small cubes of basalt rubble. They covered the top with turf and then piled about four tons of scrap timber and brushwood against the walls and set fire to them. Because of a snowstorm

in progress, a strong wind fanned the blazing mixture of wood and stone so that the inner core did attain some vitrification of the rock.

In June 1937, Childe and Thorneycroft duplicated their test vitrification at the ancient fort of Rahoy, in Argyllshire, using rocks found at the site. Their experiments did not resolve any of the questions surrounding vitrified forts, however, because they had only proven that it was theoretically possible to pile enough wood and brush on top of a mixture of wood and stone to vitrify the mass of stone. One criticism

of Childe is that he seems to have used a larger proportion of wood to stone than many historians believe made up the ancient wood and stone fortresses.

An important part of Childe's theory was that it was invaders, not the builders, who were assaulting the forts and then setting fire to the walls with piles of brush and wood; however, it is hard to understand why people would have repeatedly built defences that invaders could destroy with fire, when great ramparts of solid stone would have survived unscathed.

Critics of the assault theory point out that in order to generate enough heat by a natural fire, the walls would have to have been specially constructed to create the heat necessary. It seems unreasonable to suggest the builders would specifically create forts to be burned or that such a great effort would be made by invaders to create the kind of fire it would take to vitrify the walls-at least with traditional techniques.

One problem with all the many theories is their assumption of a primitive state of culture associated with ancient Scotland.

It is astonishing to think of how large and well coordinated the

population or army must have been that built and inhabited these ancient structures. Janet and Colin Bord in their book, Mysterious Britain,9 speak of Maiden Castle to give an idea of the vast extent of this marvel of prehistoric engineering.

It covers an area of 120 acres, with an average width of 1,500 feet and length of 3,000 feet. The inner circumference is about $1^{l_{b}}$ miles round, and it has been estimated...that it would require 250,000 men to defend it! It is hard, therefore, to believe that this construction was intended to be a defen sive position.

A great puzzle to archaeologists has always been the multi ple and labyrinthine east and west entrances at each end of the enclosure. Originally they may have been built as a way for processional entry by people of the Neolithic era. Later, when warriors of the Iron Age were using the site as a

fortress, they probably found them use ful as a means of confusing the attack ing force trying to gain entry. The fact that so many of these "hill-forts" have two entrances-one north of east and the other south of west—also suggests some form of Sun ceremonial.

With 250,000 men defending a fort, we are talking about a huge army in a very organised society. This is not a bunch of fur-wearing Picts with spears defending a fort from marauding bands of hunter-gatherers. The questions remain, though. What huge army might have occupied these cliff-

side forts by the sea or lake entrances? And what massive maritime power were these people unsuccessfully defending themselves against?

The forts on the western coast of Scotland are reminiscent of the mysterious clifftop forts in the Aran Islands on the west coast of Ireland. Here we truly have shades of the Atlantis story. with a powerful naval fleet attacking and conquering its neighbours in a terrible war. It has been theorised that the terrible battles of the Atlantis story took place in Wales, Scotland, Ireland and England-however, in the case of

What long-ago Armageddon destroyed ancient Scotland?

rus, pitch, sulphur or other flammable chemicals.)

burn them down in a hellish blaze?

In ancient times there was a substance known through writings

as Greek fire. This was some sort of ancient napalm bomb that

was hurled by catapult and could not be put out. Some forms of

Greek fire were even said to burn under water and were therefore

used in naval battles. (The actual composition of Greek fire is

unknown, but it must have contained chemicals such as phospho-

cation? While ancient astronaut theorists may believe that

extraterrestrials with their atomic weapons vitrified these walls, it

seems more likely that they are the result of a man-made apoca-

lypse of a chemical nature. With siege machines, battleships and

Greek fire, did a vast flotilla storm the huge forts and eventually

Could a form of Greek fire have been responsible for the vitrifi-



The evidence of the vitrified forts is clear: some hugely successful and organised civilisation was living in Scotland, England and Wales in prehistoric times, circa 1000 BC or more, and was building gigantic structures including forts. This apparently was a maritime civilisation that prepared itself for naval warfare as well as other forms of attack.

Vitrified Ruins in France, Turkey and the Middle East

Vitrified ruins can also be found in France, Turkey and some areas of the Middle East.

Vitrified forts in France are discussed in the American Journal of Science (vol. 3, no. 22, 1881, pp. 150-151) in an article entitled "On the Substances Obtained from Some 'Forts Vitrifiés' in France", by M. Daubrée. The author mentions several forts in Brittany and northern France whose granite blocks have been vitrified. He cites the "partially fused granitic rocks from the forts of Châteauvieux and of Puy de Gaudy (Creuse), also from the neighbourhood of Saint Brieuc (Côtes-du-Nord)".10 Daubrée, understandably, could not readily find an explanation for the vitrification.

Just as Egypt goes back many thousands of years BC and is ultimately connected to Atlantis, so does the ancient Hittite Empire. Like the Egyptians, the Hittites carved massive granite sphinxes, built on a cyclopean scale and worshipped the Sun.

Similarly, the ruins of Hattusas in central Turkey, an ancient Hittite city, are partially vitrified. The Hittites are said to be the inventors of the chariot, and horses were of great importance to them. It is on the ancient Hittite stelae that we first see a depiction of the chariot in use. However, it seems unlikely that horsemanship and wheeled chariots were invented by the Hittites; it is highly likely that chariots were in use in ancient China at the same time.

The Hittites were also linked to the world of ancient India. Proto-Indic writing has been found at Hattusas, and scholars now admit that the civilisation of India, as the ancient Indian texts like the Ramayana have said, goes back many millennia.

In his 1965 book, The Bible as History,11 German historian



Indonesian tektites

Werner Keller cites some of the mysteries concerning the Hittites. According to Keller, the Hittites are first mentioned in the Bible (in Genesis 23) in connection with the biblical patriarch Abraham who acquired from the Hittites a burial place in Hebron for his wife Sarah. Conservative classical scholar Keller is confused by this, because the time period of Abraham was circa 2000–1800 BC, while the Hittites are traditionally said to have appeared in the 16th century BC.

Even more confusing to Keller is the biblical statement (in Numbers 13:29-30) that the Hittites were the founders of

Jerusalem. This is a fascinating statement, as it would mean that the Hittites also occupied Ba'albek, which lies between their realm and Jerusalem. The Temple Mount at Jerusalem is built on a foundation of huge ashlars, as is Ba'albek. The Hittites definitely used the gigantic megalithic construction known as cyclopeanhuge, odd-shaped polygonal blocks, perfectly fitted together. The massive walls and gates of Hattusas are eerily similar in construction to those in the high Andes and other megalithic sites around the world. The difference at Hattusas is that parts of the city

are vitrified, and the walls of rock have been partly melted. If the Hittites were the builders of Jerusalem, it would mean that the ancient Hittite Empire existed for several thousand years and had frontiers with Egypt. Indeed, the Hittite hieroglyphic script is undeniably similar to Egyptian hieroglyphs, probably more so than any other language.

Just as Egypt goes back many thousands of years BC and is ultimately connected to Atlantis, so does the ancient Hittite Empire. Like the Egyptians, the Hittites carved massive granite sphinxes, built on a cyclopean scale and worshipped the Sun. The Hittites also used the common motif of a winged disc for their Sun god, just as the Egyptians did. The Hittites were well known in the ancient world because they were the main manufacturers of iron and bronze goods. The Hittites were metallurgists and seafarers. Their winged discs may in fact have been representations of *vimanas*—flying machines.

Some of the ancient ziggurats of Iran and Iraq also contain vitrified material, sometimes thought by archaeologists to be caused by the Greek fire. For instance, the vitrified remains of the ziggurat at Birs Nimrod (Borsippa), south of Hillah, were once confused with the Tower of Babel. The ruins are crowned by a mass of vitrified brickwork—actual clay bricks fused together by intense heat. This may be due to the horrific ancient wars described in the *Ramayana* and *Mahabharata*, although early archaeologists attributed the effect to lightning.

Greek Fire, Plasma Guns and Atomic Warfare

If one were to believe the great Indian epic of the *Mahabharata*, fantastic battles were fought in the past with airships, particle beams, chemical warfare and presumably atomic weapons. Just as battles in the 20th century have been fought with incredibly devastating weapons, it may well be that battles in the latter days of Atlantis were fought with highly sophisticated, high-tech weapons.

The mysterious Greek fire was a "chemical fireball".

Incendiary mixtures go back at least to the 5th century BC, when Aineias the Tactician wrote a book called *On the Defence of Fortified Positions*. Said he:¹²

And fire itself, which is to be powerful and quite inextinguish able, is to be prepared as follows. Pitch, sulphur, tow, gran ulated frankincense, and pine sawdust in sacks you should ignite if you wish to set any of the enemy's works on fire.

L. Sprague de Camp mentions in his book, *The Ancient Engineers*,¹³ that at some point it was found that petroleum, which seeps out of the ground in Iraq and elsewhere, made an ideal base for incendiary mixtures because it could be squirted from syringes of the sort then used in fighting fires. Other substances were added to it, such as sulphur, olive oil, rosin, bitumen, salt and quicklime.

Some of these additives may have helped—sulphur at least

made a fine stench—but others did not, although it was thought that they did. Salt, for instance, may have been added because the sodium in it gave the flame a bright orange colour. The ancients, supposing that a brighter flame was necessarily a hotter flame, mistakenly believed that salt made the fire burn more fiercely. Such mixtures were put in thin wooden casks and thrown from catapults at hostile ships and at wooden siege engines and defence works.

According to de Camp, in AD 673 the architect Kallinikos fled ahead of Arab invaders from Helipolis-Ba'albek to Constantinople. There he revealed to Emperor Constantine IV an improved formula for a liquid incendiary. This could not only be squirted at the foe but could also be used with great effect at sea, because it caught fire when it touched the water and floated, flaming on the waves.

De Camp says that Byzantine galleys were armed with a flame-throwing apparatus in the bow, consisting of a tank of this mixture, a pump and a nozzle. With the help of this compound, the Byzantines broke the Arab sieges of AD 674–76 and AD 715–18, and also beat off the Russian attacks of AD 941

and 1043. The incendiary liquid wrought immense havoc; of 800 Arab ships which attacked Constantinople in 716 AD, only a handful returned home.

The formula for the wet version of Greek fire has never been discovered. Says de Camp:

By careful security precautions, the Byzantine Emperors succeeded in keeping the secret of this substance, called "wet fire" or "wild fire", so dark that it never did become general ly known. When asked about it, they blandly replied that an angel had revealed the formula to the first Constantine.

We can, therefore, only guess the nature of the mixture. According to one disputed theory, wet fire was petroleum with an admixture of calcium phosphide, which can be made from lime, bones and urine. Perhaps Kallinikos stumbled across this substance in the course of alchemical experiments.

Vitrification of brick, rock and sand may have been caused by any number of high-tech means. New Zealand author Robin

...there are five methods by which the ancients or "ancient astronauts" might have waged war on various societies on planet Earth: plasma guns, fusion torches, holes punched in the ozone layer, manipulation of weather processes and the release of immense energy, such as with an atomic blast.

Collyns suggests in his book, *Ancient Astronauts: A Time Reversal?*,¹⁴ that there are five methods by which the ancients or "ancient astronauts" might have waged war on various societies on planet Earth. He outlines how these methods are again on the rise in modern society. The five methods are: plasma guns, fusion torches, holes punched in the ozone layer, manipulation of weather processes and the release of immense energy, such as with an atomic blast. As Collyns's book was published in Britain in 1976, the mentions of holes in the ozone layer and weather warfare seem strangely prophetic.

Explaining the plasma gun, Collyns says:

The plasma gun has already been developed experimentally for peaceful purposes: Ukrainian scientists from the Geotechnical Mechanics Institute have experimentally drilled tunnels in iron ore mines by using a plasmatron, i.e., a

plasma gas jet which delivers a temperature of 6,000°C.

A plasma, in this case, is an electrified gas. Electrified gases are also featured in the *Vymaanika-Shaastra*,¹⁵ the ancient book from India on *vimanas*, which cryptically talks of using for fuel the liquid metal mercury, which could be a plasma if electrified.

Collyns goes on to describe a fusion torch: This is still another possible method of warfare used by spacemen, or ancient advanced civilisations on Earth. Perhaps the solar mirrors of antiquity really were fusion torches? The fusion torch is basically a further development

> of the plasma jet. In 1970 a theory to develop a fusion torch was presented at the New York aerospace science meeting by Drs Bernard J. Eastlund and William C. Cough. The basic idea is to generate a fantastic heat of at least fifty million degrees Celsius which could be contained and controlled. That is, the energy released could be used for many peaceful applications with zero radioactive waste products to avoid contaminating the environment, or zero production of radioactive elements which would

be highly dangerous, such as plutonium which is the most deadly substance known to man. Thermonuclear fusion occurs naturally in stellar processes, and unnaturally in man-made H-bomb explosions.

The fusion of a deuterium nucleus (a heavy hydrogen isotope which can be easily extracted from sea water) with another deuterium nucleus, or with tritium (another isotope of hydrogen) or with helium, could be used. The actual fusion torch would be an ionised plasma jet which would vaporise anything and everything that the jet was directed at—if...used for harmful purposes—while for peaceful applications, one use of the torch could be to reclaim basic ele ments from junk metals.

University of Texas scientists announced in 1974 that they had actually developed the first experimental fusion torch which gave an incredible heat output of ninety-three degrees

Continued on page 83

The Evidence for Ancient Atomic Warfare

Continued from page 59

Celsius. This is five times the previous hottest temperature for a contained gas and is twice the minimum heat needed for fusion, but it was held only for one fifty-millionth of a second instead of the one full second which would be required.

It is curious to note here that Dr Bernard Eastlund is the patent holder of another unusual device—one that is associated with the High-frequency Active Auroral Research Program (HAARP), based at Gakona, Alaska. HAARP is allegedly linked to weather manipulation—one of the ways in which Collyns thinks the ancients waged warfare.

As far as holes in the ozone layer and weather manipulation go, Collyns says:

Soviet scientists have discussed and proposed at the United Nations a ban on developing new warfare ideas such as creating holes or "windows" in the ozone layer to bombard specific areas of the Earth with increased natural ultra-violet radiation, which would kill all life-forms and turn the land into barren desert. Other ideas discussed at the meeting were the use of "infrasound" to demolish ships by creating acoustic fields on the sea, and hurling a huge chunk of rock into the sea with a cheap atomic device. The resultant tidal wave could demolish the coastal fringe of a country. Other tidal waves could be created by detonating nuclear devices at the frozen poles. Controlled floods, hurricanes, earthquakes and droughts directed towards specific targets and cities are other possibilities.

Finally, although not a new method of warfare, incendiary weapons are now being developed to the point where "chemical fireballs" will be produced which radiated thermal energy similar to that of an atomic bomb.

Vitrified Ruins in California's Death Valley: Evidence of Atomic War?

In Secrets of the Lost Races,¹⁶ Rene Noorbergen discusses the evidence for a cataclysmic war in the remote past that included the use of airships and weapons that vitrified stone cities.

The most numerous vitrified remains in the New World are located in the

western United States. In 1850 the American explorer Captain Ives William Walker was the first to view some of these ruins, situated in Death Valley. He discovered a city about a mile long, with the lines of the streets and the positions of the buildings still visible. At the center he found a huge rock, between 20 to 30 feet high, with the remains of an enormous structure atop it. The southern side of both the rock and the building was melted and vitrified. Walker assumed that a volcano had been responsible for this phenomenon, but there is no volcano in the area. In addition, tectonic heat could not have caused such a liquefication of the rock surface.

An associate of Captain Walker who followed up his initial exploration commented: "The whole region between the rivers Gila and San Juan is covered with remains. The ruins of cities are to be found there which must be most extensive, and they are burnt out and vitrified in part, full of fused stones and craters caused by fires which were hot

Continued on page 84

The Evidence for Ancient Atomic Warfare

Continued from page 83

enough to liquefy rock or metal. There are paving stones and houses torn with monstrous cracks... [as though they had] been attacked by a giant's fireplough.'

These vitrified ruins in Death Valley sound fascinating-but do they really exist? There certainly is evidence of ancient civilisations in the area. In Titus Canyon, petroglyphs and inscriptions have been scratched into the walls by unknown prehistoric hands. Some experts think the graffiti might have been made by people who lived here long before the Indians we know of, because extant Indians know nothing of the glyphs and, indeed, regard them with superstitious awe.

Says Jim Brandon in Weird America:17 Piute legends tell of a city beneath Death Valley that they call Shin-au-av. Tom Wilson, an Indian guide in the 1920s, claimed that his grandfather had rediscovered the place by wandering into a miles-long labyrinth of caves beneath the valley floor.

Eventually the Indian came to an underworld city where the people spoke an incomprehensible language and wore clothing made of leather.

Wilson told this story after a prospec tor named White claimed he had fallen through the floor of an abandoned mine at Wingate Pass and into an unknown tunnel. White followed this into a series of rooms, where he found hundreds of leather-clad humanoid mummies. Gold bars were stacked like bricks and piled in hins.

White claimed he had explored the caverns on three occasions. On one, his wife accompanied him; and on another, his partner, Fred Thomason. However, none of them [was] able to relocate the opening to the cavern when they tried to take a group of archaeologists on a tour of the place.

To be continued next issue...

Endnotes

1. Steiger, Brad and Ron Calais, Mysteries of Time & Space, Prentice Hall, New Jersey, 1974. 2. ibid.

3. Corliss, William, Geological Anomalies, The Sourcebook Project, Glen Arm, Maryland, 1974. 4. Corliss, William, Ancient Man: A Handbook of Puzzling Artifacts, The Sourcebook Project,

Glen Arm, Maryland, 1978. 5. Welfare, Simon and John Fairley, Arthur C.

Clarke's Mysterious World, Wm Collins & Sons, London, 1980.

- 6. ibid.
- 7. ibid. 8. ibid.

9. Bord, Janet and Colin Bord, Mysterious Britain, Granada Publishing, London, 1972 10. Edwards, Frank, Strangest of All, Ace Books, New York, 1956.

11. Keller, Werner, The Bible As History,

Hodder & Stoughton, London, 1956.

12. Sprague de Camp, L., The Ancient Engineers, Ballantine Books, New York, 1960.

13. ibid.

14. Collyns, Robin, Ancient Astronauts: A Time Reversal?, Sphere Books, London, 1976.

15. Bharadwaaja, Maharshi, Vymaanika-Shaastra, translated and published by G.R.

Josyer, Mysore, India, 1979.

16. Noorbergen, Rene, Secrets of the Lost Races, Barnes & Noble Publishers, New York, 1977. 17. Brandon, Jim, Weird America, E.P. Dutton, New York, 1978.

About the Author:

David Hatcher Childress is an explorer, publisher and author of more than 15 books on lost civilisations and science, as well as on free energy, antigravity and UFOs. He is a regular speaker on the conference circuit and a sought-after guest on US radio talk shows and TV specials. His new book, Technology of the Gods, is reviewed in this issue.